

# PATENT ABSTRACTS OF JAPAN

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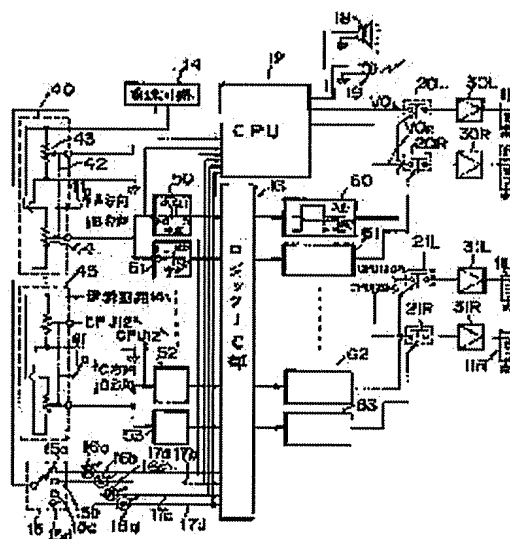
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## (54) CONTROLLER OF CONSTRUCTION MACHINE

### (57)Abstract:

**PURPOSE:** To switch control patterns from one to another at a low cost and enhance the reliability of this switching action.

**CONSTITUTION:** A plurality of different combinations of the kind (right or left) of plural control levers 41..., motor-driven actuators 1L, 1R... corresponding to directions A, B, C, D... of control, and switching circuits 20R, 20L... are preset, and one of the plural combinations is selected by a control pattern selecting switch 15. A CPU 12 in a controller receives the result of this selection and then drives and controls the motor-driven actuator 1L, 1R... corresponding to the selected combination and turns off (breaks) the corresponding switching circuit 20L, 20R....



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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
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**CLAIMS**


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**[Claim(s)]**

[Claim 1] In the control unit of a construction equipment with the controller which detects the actuation direction and variation rate of a control lever, respectively, and carries out drive control of the electric actuator corresponding to the this detected actuation direction according to said detected variation rate Two or more combination from which said electric actuator corresponding to the actuation direction of said control lever differs is set up beforehand. The control unit of the construction equipment which was made to carry out drive control of the electric actuator according to the combination which established a selection means to choose the combination of one among the combination of these plurality, was made to input the contents of selection of said selection means into said controller, and was chosen by this controller.

[Claim 2] The controller which detects the actuation direction and variation rate of a control lever, respectively, and carries out drive control of the electric actuator corresponding to the this detected actuation direction according to said detected variation rate, It is allotted to each \*\* in each output Rhine from this controller to each electric actuator. The electric actuator corresponding to said control lever which serves as a neutral location based on said detection result, Or it sets to the control unit of a construction equipment with a command signal cutoff means to intercept the drive command signal supplied to the electric actuator corresponding to the actuation direction contrary to the actuation direction. Two or more combination from which said electric actuator corresponding to the actuation direction of said control lever and said command signal cutoff means differ is set up beforehand. A selection means to choose the combination of one among the combination of these plurality is established. The control unit of the construction equipment it was made to operate a command signal cutoff means while carrying out drive control of the electric actuator according to the combination which was made to input the contents of selection of said selection means into said controller, and was chosen by this controller with said selection means.

[Claim 3] While forming the sensor which detects the variation rate of said control lever, when said control lever displaces to one side, and when it is in a neutral location, the 1st detecting signal is outputted. A neutral detection means to output the 2nd detecting signal when a control lever displaces to an another side side, and when it is in a neutral location is established. Said controller It is what performs the abnormality judging of a control lever based on the output of said sensor and said neutral detection means. Said command signal cutoff means The control unit of the construction equipment according to claim 2 which is what operates so that the drive command signal supplied to a corresponding electric actuator may be intercepted, when the 1st and 2nd detecting signals are outputted from said neutral detection means.

[Claim 4] Two displacement sensors which are interlocked with lever actuation of said control lever, and detect the variation rate of a lever for every actuation direction are prepared. Said controller It is what performs the abnormality judging of a control lever based on the output of said two displacement sensors. Said command signal cutoff means The electric actuator corresponding to the control lever which serves as a neutral location based on the output of one [ at least ] displacement sensor between said two displacement sensors, Or the actuation

[illegible]